

Medical Department
of the
University of Pennsylvania

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Phila. Nov. 1st 1842.

MEDICAL DEPARTMENT

OF THE

UNIVERSITY OF PENNSYLVANIA.

THE MEDICAL FACULTY OF THE UNIVERSITY OF PENNSYLVANIA consider it due, as well to the public as to the Institution under their care, to distribute such information in relation to the latter as may place its advantages fairly before the profession. With this object, they have caused to be published the following history of the School from its foundation, with an account of its present condition and the regulations by which it is governed. In pursuing this course, they wish to be understood as not having the least disposition to disparage other similar institutions. The public will make its own comparisons, and in relation to the patronage it may extend will be influenced by its own views of interest. All that the Faculty of the University desire is, that the means of forming a correct and unprejudiced judgment may be placed in its possession.

Philadelphia, October, 1841.

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HISTORY OF THE SCHOOL.

I. *From the Origin of the School to its Division in 1789.*

THE school which now bears the title of University of Pennsylvania had been in existence, first as a simple ACADEMY and afterwards as a COLLEGE, for nearly sixteen years, before a system of medical instruction was admitted into its plan. This event may be considered as having taken place on the 3d of May, 1765—the date at which the first medical professor was appointed. No school of medicine at that time existed in the country; and the College of Philadelphia undoubtedly deserves the credit of having opened this new path of liberal study in America.

The idea of establishing a medical school in Philadelphia appears to have been first conceived by Dr. William Shippen and Dr. John Morgan. Some conversation upon the subject passed between these physicians while prosecuting their studies in Europe; but to which of the two the merit of priority in the conception belongs, has not been determined. Dr. Shippen, on his return from Europe, in the year 1762, commenced a course of Lectures on Anatomy, in the Introductory to which he expressed his belief in “the expediency and practicability of teaching medicine in all its branches” in the city of Philadelphia. He repeated this course privately for three successive years; but abstained from any further steps towards the accomplishment of his plan, till he should be joined by Dr. Morgan, who still remained in Europe. In the mean time, the latter gentleman had formed the project of engrafting a medical department on the College of Philadelphia, and had secured in its favour the opinions and recommendations of several influen-

tial friends of the institution residing in Great Britain. Among these may be mentioned Thomas Penn, the proprietary of Pennsylvania, and Mr. Hamilton and Mr. Peters, former presidents of the Board of Trustees of the College, from all of whom Dr. Morgan, on his return to America, brought letters to the Trustees, advising the establishment of medical professorships, and recommending the Doctor himself to their choice as one of the proposed Faculty. These letters, together with a written communication from Dr. Morgan, "setting forth his plan of opening medical schools under the patronage and government of the College, and intimating his desire to be appointed Professor of the Theory and Practice of Physic," were laid before the board at a special meeting held on the 3d of May, 1765. The project appears to have met with the unanimous approval of the Trustees, who immediately took the first step towards its accomplishment by the appointment of Dr. Morgan to the office for which he had applied. At the collegiate commencement, which took place near the close of the same month, an address was delivered by the new professor, in which the circumstances favourable to the establishment of the proposed school, and the advantages likely to accrue from it, were set forth with a clearness and force which must have strongly tended to conciliate public opinion in its favour. The following passage appears almost prophetic.

"Perhaps this medical institution, the first of its kind in America, though small in its beginning, may receive a constant accession of strength, and annually exert new vigour. It may collect a number of young persons, of more than ordinary abilities, and so improve their knowledge as to spread its reputation to distant parts. By sending those abroad duly qualified, or by exciting an emulation among men of parts and literature, it may give birth to other useful institutions of a similar nature, or occasional rise, by its example, to numerous societies of different kinds calculated to spread the light of knowledge through the whole American continent, wherever inhabited."

On the 23d of September of the same year, Dr. Morgan received a colleague by the unanimous appointment of Dr. Shippen to the Professorship of Anatomy and Surgery. The other

chairs requisite to the formation of a complete Faculty, were for a time left unsupplied in consequence of the absence in Europe of the persons who were looked to as their ultimate occupants. In the mean while, the business of the school was commenced by the two professors already appointed. Their courses were announced by advertisement, that of Dr. Shippen to begin on the 14th, that of Dr. Morgan on the 18th of November, the former to embrace instruction in Anatomy, Surgery, and Midwifery, the latter to comprehend all the remaining medical sciences, but with a particular devotion to *Materia Medica*. Such was the humble commencement of a school, which can boast among its alumni of thousands of the most respectable practitioners in this country.

The next step in the organization of the school was the adoption, on the 12th of May, 1767, of a set of rules in relation to the medical honours to be conferred by the College. It was determined that there should be two degrees, those, namely, of *Bachelor of Medicine* and *Doctor of Medicine*, corresponding with the degrees of *Bachelor* and *Master of Arts* conferred in the other department. In relation to the lower degree, or that of *Bachelor of Medicine*, the following rules were adopted.

“1. Such students as have not taken a degree in the arts in any college shall, before receiving a degree in physic, satisfy the trustees and professors of this college, of their knowledge in the Latin language, and such branches of Mathematics, Natural and Experimental Philosophy, as shall be judged requisite to a medical education.—2. Each student shall take at least one course in Anatomy, *Materia Medica*, Chemistry, Theory and Practice of Physic, and Clinical Lectures, and shall attend the practice of the Pennsylvania Hospital for one year; and may then be admitted to a public examination for a Bachelor’s degree, provided that on a previous private examination by the medical trustees and professors, and such other trustees and professors as choose to attend, he shall be judged fit for a public examination, without attending any more courses in the medical school.—3. It is further required, that each student, previous to the Bachelor’s degree, shall have served a sufficient apprenticeship to some reputable practitioner in Phy-

sic, and be able to make it appear that he has a general knowledge in Pharmacy."

The prerequisites for the degree of Doctor of Medicine were determined as follows.

"It is required for this degree, that at least three years shall have intervened, from the time of taking the Bachelor's degree, and that the candidate be full twenty-four years of age; who shall also write and defend a thesis publicly in College, unless he should be beyond seas, or so remote on the continent of America as not to be able to attend without manifest inconvenience; in which case, on sending a written thesis, such as shall be approved of by the College, the candidate may receive his Doctor's degree, and his thesis is to be printed and published at his own expense."

On the 26th of January, 1768, Dr. Adam Kuhn was appointed Professor of Materia Medica and Botany, and in the following May, Dr. Thomas Bond was elected to the chair of Clinical Medicine. Dr. Bond was one of the physicians of the Pennsylvania Hospital, and had already distinguished himself by clinical lectures delivered in that institution. The Introductory to his first course of Lectures in the Hospital, delivered on the 3d of December, 1766, has been preserved, and may be seen in the fourth volume of the North American Medical and Surgical Journal.

At the commencement of the College, held on the 21st of June, 1768, medical honours were conferred for the first time in America. The following gentlemen received the degree of Bachelor of Medicine on this occasion:—

JOHN ARCHER of Newcastle county, on the Delaware, BENJAMIN COWELL of Bucks county, Pennsylvania, SAMUEL DUFFIELD and JONATHAN POTTS of Philadelphia, JONATHAN ELMER of Cumberland county, New Jersey, HUMPHREY FULLERTON of Lancaster county, Pennsylvania, DAVID JACKSON of Chester county, Pennsylvania, JOHN LAWRENCE of East Jersey, JAMES TILTON of Kent county, on the Delaware, and NICHOLAS WAY of Wilmington.

On the 1st of August, 1769, the organization of the College was completed, according to the original design, by the election

of Dr. Benjamin Rush to the chair of Chemistry. It may be proper to mention that Dr. Rush brought with him, on returning from Europe, a set of chemical apparatus, as a present for the College from the proprietary, Thomas Penn. This was deemed of so much importance, that the fact of the donation was made public in the advertisement announcing the commencement of the lectures.

During the winters of 1769-70, and 1770-71, annual courses of lectures were delivered by all the professors whose appointment has been mentioned, and in addition a course upon Natural Philosophy was given to the medical class by the Rev. Dr. Smith, Provost of the College; but after the latter date, we can find no notice of regular clinical lectures, and the chair of Clinical Medicine, on the death of Dr. Bond, which took place in 1784, remained vacant till united with the Institutes of Medicine.

No other material change occurred in the organization of the school or in the members of the Faculty, until the year 1789, if we except the appointment of William Bartram to a professorship of Botany in 1782, which, however, does not appear to have produced any practical result. We may, indeed, consider the school, from its first complete organization, to the period of its division in 1789, as consisting essentially of the four following professorships, filled as here stated:—

Professorships.

1. Theory and Practice of Medicine,
2. Anatomy, Surgery, and Midwifery,
3. Materia Medica,
4. Chemistry.

Professors.

DR. JOHN MORGAN;
DR. WILLIAM SHIPPEN;
DR. ADAM KUHN;
DR. BENJAMIN RUSH.

The following table presents a statement of the number of pupils who received the Bachelor's degree in each of the years from the date of the first medical commencement, to the period above alluded to.

<i>Date.</i>	<i>Graduates.</i>	<i>Date.</i>	<i>Graduates.</i>	<i>Date.</i>	<i>Graduates.</i>
A. D. 1768	10	A. D. 1780	3 4	A. D. 1785	9
1769	8	1781	2 3	1786	4
1770	1	1782	8	1787	5
1771	7	1783	4	1788	6 or 9?
1773	2	1784	8	1789	3 4

* phil'd 1774 ~

It would appear, from the records of the school, that comparatively few of the graduates ever applied for the Doctor's degree. It is probable that the number of the pupils who attended the lectures was much larger than might now be inferred from the list of graduates, as the possession of a medical degree was at that time deemed much less essential to success in practice than at present, and many probably availed themselves of the opportunity of acquiring professional knowledge afforded by the lectures, who were indisposed to comply with all the conditions requisite for obtaining the honours of the institution. In fact we find it stated in the minutes of the Board of Trustees, that the number of medical students attending the lectures in the spring of 1779, was sixty, although no record has been kept of any graduations in that year, and it is probable that none took place.

The operations of the medical school were of course suspended during the occupation of Philadelphia by the British army in the war of the Revolution; and from the table above given it may be inferred that they languished throughout the whole period of the war.

A change which took place in the government of the College in the year 1779, has not hitherto been alluded to, because, though of a serious character, it had no material ultimate influence upon the medical department. By an unjust and unconstitutional act, the Legislature of Pennsylvania, in the month of September, 1779, abrogated the charters granted to the Institution by the proprietors, removed the trustees, provost, vice-provost, and professors from their offices, and transferred all the property to a new institution, which was endowed additionally out of the estates confiscated during the war, and received from its founders the title of *University of Pennsylvania*. As the medical professors lost their places by this act, though not aimed against them individually, it became necessary to organize the medical faculty anew in connexion with the University. Some difficulty was experienced in accomplishing this object. A succession of appointments and resignations took place for a period of more than three years; but in the autumn of 1783, the affair was finally arranged by the reinstatement of the former professors in the stations which they had respectively held in the College.

II. History of the School from 1789 to 1810.

In the year 1789 a new era may be said to have commenced in the history of the medical school. On the 6th of March, the Legislature, recognising the injustice of their predecessors, passed a law, by a great majority, reinstating the trustees and professors of the College in all their former estates and privileges—but still leaving the University in existence with the endowment which it had received out of the confiscated estates. Two institutions were thus established, under the titles respectively of the COLLEGE OF PHILADELPHIA and the UNIVERSITY OF PENNSYLVANIA, each having the privilege of connecting a medical school with its other departments, and each unwilling to forego the exercise of that privilege in favour of the other. The consequence was the formation of two medical faculties, consisting partly of the members of the old faculty, partly of professors newly elected.

It is worthy of notice as a curious coincidence, that Dr. Morgan, the first professor in the school, and to be regarded as in some measure its founder, died at this period, before the new arrangements for the formation of the two faculties could be completed.

After the death of Dr. Morgan, only three of the old faculty remained, of whom Dr. Shippen retained a place in both schools, Dr. Kuhn continued in the University, and Dr. Rush joined the College. In the former school, the faculty was completed by the appointment of Dr. James Hutchinson, an active member of the Board of Trustees, to the united chairs of Materia Medica and Chemistry; in the latter, by the election of Dr. Samuel P. Griffitts to the professorship of Materia Medica, Dr. Caspar Wistar to that of Chemistry, which was now united with the Institutes of Medicine, and Dr. Benjamin S. Barton to a newly established professorship devoted to Botany and Natural History. The following synopsis will exhibit the organization of the two schools, as it was completed towards the close of the year 1789.

COLLEGE OF PHILADELPHIA.

Professorships.

1. Anatomy and Surgery,	DR. WILLIAM SHIPPEN;
2. Theory and Practice of Medicine,	DR. BENJAMIN RUSH;
3. Materia Medica and Pharmacy,	DR. SAMUEL P. GRIFFITS;
4. Chemistry and the Institutes of Medicine,	DR. CASPAR WISTAR;
5. Botany and Natural History,	DR. BENJAMIN S. BARTON.

Professors.

UNIVERSITY OF PENNSYLVANIA.

Professorships.

1. Anatomy and Surgery,	DR. WILLIAM SHIPPEN;
2. Theory and Practice of Medicine,	DR. ADAM KUHN;
3. Materia Medica and Chemistry,	DR. JAMES HUTCHINSON.

Professors.

During the separate existence of the two schools, the University retained the former practice of conferring the preparatory degree of Bachelor of Medicine. This, however, was abandoned by the College, which conferred only the degree of Doctor of Medicine. The number of graduates was as follows:—

In the COLLEGE.

<i>Date.</i>	<i>Graduates.</i>
A. D. 1790	5
1791	5

In the UNIVERSITY.

<i>Date.</i>	<i>Graduates.</i>
A. D. 1790	12
1791	1

The impolicy of attempting to sustain two schools in a place of which the patronage was not more than sufficient for the support of one, was too obvious to escape the notice of intelligent men; and we accordingly find that the idea of a union soon occurred to those interested in the different institutions. Nor was it long before so desirable an object was effected. The trustees of the College, having received an intimation that a disposition existed on the part of the trustees of the University to confer with them respecting a union of the interests of the two institutions, made a proposition to this effect to the latter body, by whom it was promptly accepted. Conferences accordingly took place, which resulted in an application to the Legislature for the requisite alteration of the charters; and this application was soon followed by a law uniting the two corporations into one. This event took place on the 30th of Septem-

ber, 1791, somewhat more than two years after the revival of the College. The united school took the name of University of Pennsylvania, which it has since retained.

Some difficulty existed in arranging the new Faculty; as it was necessary to include all the Professors of the two former Faculties, and at the same time to consult the qualifications and tastes of the several individuals concerned. The organization of the school was consequently, so far as related to the arrangement of the chairs, less in accordance with the condition of medical science at the time, than with the peculiar circumstances under which the institution was placed. The scheme adopted was obviously provisional, and only waited a change of circumstances to receive important modifications. Dr. Shippen retained the station he had held in both schools. Dr. Kuhn, as the next professor in point of seniority, was left in possession of the chair of the Theory and Practice, which he had held in the University; while Dr. Rush was provided for by a new professorship of the Institutes and Clinical Medicine. Dr. Wistar surrendered Chemistry to Dr. Hutchinson, and accepted the place of adjunct to Dr. Shippen, which was probably more in accordance with his taste. Little other change was necessary. The arrangement of the Faculty, when completed, was as follows:—

<i>Professorships.</i>	<i>Professors.</i>
1. Anatomy, Surgery, and Midwifery,	DR. WILLIAM SHIPPEN, and DR. CASPAR WISTAR, Adjunct;
2. Theory and Practice of Medicine,	DR. ADAM KUHN;
3. Institutes of Medicine, and Clinical Medicine,	DR. BENJAMIN RUSH;
4. Chemistry,	DR. JAMES HUTCHINSON;
5. Materia Medica,	DR. SAMUEL P. GRIFFITS;
6. Botany and Natural History,	DR. BENJAMIN S. BARTON.

The appointments took place on the 23d of January, 1792. The last mentioned professorship was on a different footing from the others; as attendance upon the lectures was not essential to graduation. That the above plan was considered as in some measure provisional, is evinced by the fact, that, as soon as the opportunity was offered, the two professorships of the

Theory and Practice, and of the Institutes and Clinical Medicine, and those of *Materia Medica* and of Botany and Natural History, were respectively united in one individual.

The degree of Bachelor of Medicine was now wholly discontinued, and that of Doctor of Medicine was the only honour henceforward conferred by the medical school. As prerequisites to graduation, it was determined—1. that the candidate should not be under twenty-one years of age, should have studied medicine for three years, and for two at least in connexion with the University; 2. that he should have attended at least one course of lectures of the several medical professors, with the exception of the Professor of Botany and Natural History, and should also have attended one course of Natural and Experimental Philosophy in the institution, unless he had received instruction in this branch elsewhere; and 3. that he should undergo a private examination before the Faculty, and, if approved by them, should be again privately examined by the Faculty in the presence of as many of the Trustees as might choose to attend, and finally, if found to be properly qualified, should offer a thesis, to be printed at his own expense, and defended in public at the annual medical commencement.

These provisions, though in some respects deficient, and in some unnecessarily burthensome, were sustained till the year 1807, when others were adopted, which have been found better in practice, and, with a few alterations, still continue in force. The present regulations will be given in full in a subsequent part of this sketch.

No change in the Faculty took place till the year 1794, when the chair of Chemistry became vacant by the death of Dr. Hutchinson.

Dr. John Carson, a member of the Board of Trustees, was appointed in the place of Dr. Hutchinson, but died before he had an opportunity to officiate. On the 11th of November, the Board unanimously elected the celebrated Dr. Priestley, by whom, however, the appointment was declined. The chair was not finally filled till the 7th of July, 1795, when Dr. James Woodhouse was chosen Professor. In the mean time, the duties of the office appear to have been discharged by Dr. Barton.

In the year 1796, Dr. Griffitts resigned the chair of *Materia Medica*, and was succeeded by Dr. Barton, who now became entitled to all the privileges of the other members of the Faculty, which he had not enjoyed as Professor of Botany and Natural History.

Dr. Kuhn resigned his professorship of the Theory and Practice near the close of the year 1797, having been connected with the school nearly thirty years. Dr. Rush succeeded to his duties, although he does not appear to have been regularly appointed to the chair till 1805. At least we find it stated in the minutes of the Board of Trustees for June 5th, 1805, that Dr. Rush was on that day unanimously elected Professor of the Practice of Physic. As he continued to retain his former chair, the two professorships of the Practice and of the Institutes and Clinical Medicine, were consolidated into one.

A very important change in the organization of the school was made at this time, by the separation of Surgery from Anatomy and Midwifery, and its elevation to the dignity of a distinct professorship. This separation was obviously required by the nature and extent of the subjects, which were such that no one individual could possibly do full justice to them. It was fortunate also for the school, that it was enabled by the new arrangement to avail itself of the services of Dr. Philip Syng Physick, who was unanimously elected, on the 5th of June, 1805, to the newly established chair. The health, however, of Dr. Physick, was so feeble, that he found it necessary, in a short time, to apply to the Board of Trustees for the assistance of an adjunct, and Dr. John Syng Dorsey was accordingly appointed to this station.

The death of Dr. Shippen in the year 1808, left a vacancy, which was immediately supplied by the unanimous election of Dr. Wistar, his former adjunct, on whom the chief practical duties of the professorship had before devolved. Dr. Wistar, sensible that the subject of Anatomy was alone sufficiently ample to employ all his energies, and that the school would be benefited by making Midwifery the subject of a new professorship, proposed this change, in a letter read before the Trustees on the 3d of January, 1809. The proposal, however, was not

decided on by the Board till a year afterward. In the mean time, the professorship of Chemistry, left vacant by the death of Dr. Woodhouse, was supplied by the election of Dr. John Redman Coxe, who was at the time a member of the Board of Trustees. Dr. Coxe's election took place on the 10th of July, 1809.

On the 11th of April, 1810, the Board decided that the division of the chair of Anatomy and Midwifery was expedient, and accordingly made the latter the subject of a new professorship, to which Dr. Thomas C. James was elected on the 29th of the following June. It was, however, provided, that attendance upon the lectures of the new professor should not be considered essential to the obtaining of the degree of doctor of medicine. At the same time, a professorship of Natural Philosophy in connexion with the medical school was instituted, and Dr. Robert Hare was chosen professor; but no lectures appear to have been delivered; and though subsequently, upon the resignation of Dr. Hare, the Board appointed Dr. Robert M. Patterson as his successor, the subject was found so slenderly connected with the wants of the medical student, that it could not take root in this department. The professorship was afterwards transferred to the department of natural science, and became prominent in its new position from the talents and popularity of its occupant.

The year 1810 may be considered as the close of the second period in the history of the school, a period which might be properly characterized as one of change and of progressive improvement. The first alteration was the division of the school in 1789; then came the reunion of the College and University, and the consequent expansion of the medical faculty towards the close of the year 1791; after this succeeded the concentration of the professorships as opportunity was offered by death or resignation; and finally the gradual expansion of the school upon the surer basis of the demands of medical science, until it attained its complete organization in the year 1810. The early changes were those of temporary expediency, and were attended with no striking effect in the enlargement of the class. Those which occurred at a later period were called for by a just consi-

deration of the relative importance of the various branches of medicine, and were followed by a rapid increase in the prosperity of the school, till it attained that flourishing condition which marked the close of the above mentioned period, and which has continued with little permanent variation to the present date. The following table exhibits the annual number of graduates from 1792 to 1810, inclusive.

<i>A. D. Graduates.</i>	<i>A. D. Graduates.</i>	<i>A. D. Graduates.</i>
1792 7	1799 8	1805 24
1793 10	1800 10	1806 21
1794 8	1801 10	1807 31
1795 4	1802 22	1808 60
1796 4	1803 15	1809 63
1797 15	1804 15	1810 65
1798 12		

The number of graduates, however, as before stated, cannot be taken as a just measure of the prosperity of the school; for it does not by any means bear the same relation to the number of students attending the lectures at different periods. The proportion of candidates for graduation to the number of matriculants, has been gradually increasing, from an early date in the history of the school to the present time. This result is owing partly to the increased value of a degree in the estimation of the community, which renders it more eagerly sought for; partly to the circumstance that students from other schools are now in the habit of resorting to this, in order to complete their medical education and to obtain its honours; and partly also to the removal of those embarrassments in the way of graduation, which, without affording a better test of the qualifications of the student for the practice of his profession, rendered the trouble of obtaining a degree greater, in the estimation of many, than its value. As a proof of the increasing proportion of graduates to students attending the lectures, it may be stated, that, in the year 1784, there were eight of the former to sixty of the latter; in 1790, in both schools, seventeen to one hundred; in 1810, sixty-five to four hundred and six; and in the year ending with the Commencement in the spring of 1841, when the number of graduates was greatest, one hundred and sixty-six to four hundred and twelve.

III. *History of the School from 1810 to 1835.*

From 1810 to 1835, the medical school may be considered as stationary in relation to its organization. The medical faculty, however, underwent during that period many changes in its members; and various interesting incidents occurred, which deserve notice even in so slight a sketch of the history of the school as that here offered. In 1810, the faculty was thus constituted:—

<i>Professorships.</i>	<i>Professors.</i>
1. Anatomy,	DR. CASPAR WISTAR;
2. Practice, Institutes, and Clinical Medicine,	DR. BENJAMIN RUSH;
3. Materia Medica,	DR. BENJAMIN S. BARTON;
4. Chemistry,	DR. JOHN REDMAN COXE;
5. Surgery,	DR. PHILIP SYNG PHYSICK;
6. Midwifery,	DR. JOHN SYNG DORSEY, Adjunct; DR. THOMAS C. JAMES.

In 1813, the University met with a great loss in the death of Dr. Rush, who was succeeded in his chair by Dr. Barton, elected on the 14th of July. On the 13th of August, Dr. Nathaniel Chapman, who had been associated with Dr. James in his lectures on Midwifery, was elected to the professorship of Materia Medica, rendered vacant by the resignation of Dr. Barton. In October, the professorship of Midwifery was placed upon the same footing as the other professorships, attendance upon the lectures being made necessary to graduation.

No further change took place till 1816, when the death of Dr. Barton left a vacancy, which was supplied by the appointment of Dr. Chapman to the chair of the Practice, Institutes, and Clinical Medicine. Dr. Dorsey was elected successor to Dr. Chapman in Materia Medica, on the 16th of April. In the same year, the professorship of Botany and Natural History, to which Dr. Barton had been originally elected, and which he had never relinquished, was formally abolished.

The year 1818 was very eventful to the medical faculty. In the month of January, Dr. Wistar was cut off in the midst of his course, and in the height of an almost unequalled popularity.

During the remainder of the session his place was supplied by Dr. Dorsey, who was regularly appointed his successor in the following May. The chair of *Materia Medica*, which thus became vacant, was filled by the appointment of Dr. Coxe, who was succeeded in the chair of Chemistry by Dr. Robert Hare, elected on the 1st of September. Scarcely had the winter courses commenced, when the death of Dr. Dorsey rendered another choice necessary to the professorship of Anatomy. The Board of Trustees, however, were unable to act immediately in so unexpected an emergency; and the anatomical course was in the mean time conducted by Dr. Physick, who volunteered his services for this purpose.

In July, 1819, Dr. Physick was regularly elected Professor of Anatomy. The surgical chair, which was thus left unoccupied, was filled on the 7th of September by the election of Dr. William Gibson, at that time Professor of Surgery in the University of Maryland. The series of changes consequent upon the death of Dr. Wistar, was not completed till the 5th of December, 1820, when Dr. William E. Horner was elected Adjunct Professor of Anatomy.

The remaining changes up to the year 1835, may be stated in a few words. In 1825, the declining health of Dr. James rendering assistance necessary, Dr. William P. Dewees was appointed Adjunct Professor of Midwifery. In 1827, Dr. Samuel Jackson, previously Professor of *Materia Medica* in the Philadelphia College of Pharmacy, entered the University as Assistant to the Professor of the Practice and Institutes. In 1831, Dr. Physick resigned the chair of Anatomy, and was succeeded by Dr. Horner, who was elected on the 1st of November. On retiring from the active duties of the school, Dr. Physick was appointed *Emeritus Professor of Surgery and Anatomy*. In 1834, Dr. James retired from the University on account of feeble health, and on the 7th of October, Dr. Dewees was chosen Professor of Midwifery. The death of Dr. James took place in July, 1835.

While these mutations in the Faculty were going on, various incidents occurred having a bearing upon the interests and usefulness of the school. Modifications of the rules in relation to

graduation were adopted, of which the most important was the requisition of an attendance upon at least two courses of the various lectures, as essential to the obtaining of a degree. This was a salutary change; as any one familiar with the subject must be aware, that no ordinary capacity is adequate to the appreciation, and no ordinary memory to the recollection of a full course of medical instruction by attendance upon a single series of lectures on the different branches.

The foundation of that splendid anatomical collection denominated the **WISTAR MUSEUM**, was an event of no inconsiderable importance to the school. Dr. Wistar, during his long connexion with the professorship of Anatomy, had collected at much expense of money and labour, a great variety of models and preparations calculated to illustrate his lectures. After his death, these were secured to the school by the liberality of his widow; and measures were taken by the trustees to preserve and enlarge the collection by placing it in a suitable apartment, and by pecuniary appropriations. It received, in 1824, a valuable accession in the collection formerly belonging to the Pennsylvania Hospital, which was presented by the managers of that institution. Much of its present flourishing condition is also to be ascribed to the indefatigable exertions of the gentleman who now occupies the chair of Anatomy. The museum will be more particularly noticed in an account of the existing condition of the school with which this brief narrative will close.

In the year 1821, an attempt was made to introduce instruction in pharmacy, in its relations to the art of the apothecary, into the scheme of the medical school. The trustees accordingly instituted the degree of *Master of Pharmacy*, to be conferred upon such apothecaries as might be deemed most worthy of it, and afterwards upon all persons intending to become apothecaries, who should have served a regular apprenticeship of at least three years, should have attended two courses of lectures on Chemistry and on *Materia Medica* and *Pharmacy* in the University, should have sustained a good moral character, and should be able to furnish to the Board the requisite evidence of their qualifications after an examination by the professors of the branches above mentioned. This movement upon the part of

the University was called for by the very imperfect state of the pharmaceutical art at that time in the United States, and was followed, though not exactly in the mode anticipated, by the most happy results. A spirit was excited among the apothecaries themselves, which led to the establishment of a college in Philadelphia, devoted to the improvement of their profession. By this college a school was instituted, which has now been in existence many years, and has exerted a most beneficial influence not only over the pharmacy of Philadelphia, but indirectly also over that of the whole Union.

Another event worthy of notice took place about the same time. On the 4th of December, 1821, a letter from the Faculty was received by the Board, proposing to establish, under the management of the trustees, a foundation for the gratuitous education of six medical students. The trustees accepted the offer, and, in the following April, adopted a set of rules in relation to the subject. A committee of three members of the Board was appointed, whose office was annually to give due notice that applications for gratuitous admission to the lectures would be received, and to examine and determine upon the applications which might be made. The only qualifications demanded of the student were, that he should be of good moral character, in restricted circumstances, eighteen years of age, of studious habits, and possessed of sufficient literary acquirements. These regulations have continued in force to the present time; and as each appointment continues for two years, twelve individuals, whose exertions might otherwise have been repressed by their deficient means, have annually enjoyed the benefits of the foundation.

The erection of the hall occupied by the medical professors is an event which also merits notice. The lectures were originally delivered in a small building recently in the possession of the Board of Health, in Fifth, between Chestnut and Walnut streets; and the public exhibitions of the school took place in the old Academy, in Fourth, near Mulberry street, in which the department of Arts was formerly accommodated. After the purchase, in 1800, by the Trustees of the University, of the edifice in Ninth street originally intended as a residence for the

President of the United States, an addition was made for the accommodation of the medical school, which was completed about the year 1807, but underwent some extension in 1817. This was occupied by the Professors until the year 1829, when the trustees determined to remove the old buildings entirely, and to substitute for them others better adapted to the purposes of the institution. The present hall was commenced in March, 1829, and completed in October; so that the lectures underwent no interruption.

The success of the school, so far as concerns the number of pupils, has not permanently varied since the year 1810. Different causes have tended to augment the class in one year and to diminish it in another; but on the whole the fact is as just stated. This may be seen from an examination of the following table, which exhibits the number of students who attended the lectures, together with the number of graduates, in each year, from the winter of 1810-11, to that of 1840-41 inclusive.

<i>A. D.</i>	<i>Matriculants.</i>	<i>Graduates.</i>	<i>A. D.</i>	<i>Matriculants.</i>	<i>Graduates.</i>
1810-11.	406	65	1826-27.	441	131
1811-12.	387	70	1827-28.	409	133
1812-13.	349	61	1828-29.	362	109
1813-14.	345	62	1829-30.	421	127
1814-15.	319	44	1830-31.	410	151
1815-16.	388	70	1831-32.	386	134
1816-17.	436	74	1832-33.	367	117
1817-18.	465	87	1833-34.	432	145
1818-19.	422	102	1834-35.	390	135
1819-20.	330	78	1835-36.	398	132
1820-21.	325	66	1836-37.	405	162
1821-22.	357	77	1837-38.	380	157
1822-23.	455	101	1838-39.	403	158
1823-24.	424	96	1839-40.	444	163
1824-25.	487	111	1840-41.	412	166
1825-26.	440	114			

The average annual number of matriculants, as presented by this table, is four hundred.

IV. Change in the School in 1835, and subsequent History.

To complete our view of the Medical School, it remains only to mention the change in the organization and composition of the Faculty which took place in the year 1835, and then to give a short sketch of the present condition of the department.

It is well known to all those interested in the University of Pennsylvania, that the chair of *Materia Medica* became vacant in the early part of that year. An opportunity was thus offered to the trustees to extend the organization and augment the efficiency of the Faculty, without either interfering with the rights of the existing Professors, or increasing the expense of the pupil. That the subjects of the Practice and Institutes of Medicine, which had for many years been combined, were together too copious for the time and powers of one professor, was obvious to all who were acquainted with their great importance, and with the vast extension recently given to the single science of Pathology. The necessity of their separation had, indeed, been recognised in the appointment of an assistant to the Professor who occupied the united chairs. This appointment, however, was merely provisional. To give their due relative weight to the two branches, and to secure permanently adequate instruction in each, it was necessary to establish a new professorship. The trustees accordingly decided that the Institutes of Medicine should form the ground of a distinct chair, the occupant of which should be compensated, for the present, by one half the amount of the fee before received by the Professor of *Materia Medica*, while the remaining half should belong to the person who might be newly chosen to the latter chair. This arrangement secured additional instruction to the class, without injury to the older members of the Faculty, or increased expense to the student, and could not be objected to by those who entered the University under its provisions; especially as the chairs were in all respects, except in compensation, placed upon a footing with the other professorships, and even in this respect the difference was understood to be temporary. The election to fill the two chairs took place on the 6th of October, when Dr.

Samuel Jackson was chosen Professor of the Institutes of Medicine, and Dr. George B. Wood, Professor of Materia Medica and Pharmacy. On the 14th of the following November, Dr. Hugh L. Hodge was elected Professor of Midwifery, in the place of Dr. Dewees, who resigned on account of feeble health. Some modification in the arrangement of fees, without however affecting the interests of the student, followed this appointment.

The only change which has since occurred in the Faculty, was that occasioned by the death of Dr. Physick, who, though he had retired from the active duties of the school, retained an honorary connexion with it under the title of *Emeritus Professor of Surgery and Anatomy*. This event took place on the 15th of December, 1837. Dr. Dewees, whose resignation of the professorship of midwifery has been already mentioned, died in May, 1841.

Until recently, clinical lectures have been given in the Hospitals, in connexion with the University, only by members of the Faculty. During the last summer, the Board of Trustees authorized the Faculty to procure aid in this department of instruction, and Dr. William W. Gerhard was accordingly appointed to lecture upon clinical medicine in connexion with the school.

PRESENT STATE OF THE SCHOOL.

The Faculty consists of seven Professors, as follows:

NATHANIEL CHAPMAN, M. D., Professor of the Theory and Practice of Medicine;

ROBERT HARE, M. D., Professor of Chemistry;

WILLIAM GIBSON, M. D., Professor of Surgery;

WILLIAM E. HORNER, M. D., Professor of Anatomy;

SAMUEL JACKSON, M. D., Professor of the Institutes of Medicine;

GEORGE B. WOOD, M. D., Professor of Materia Medica and Pharmacy;

HUGH L. HODGE, M. D., Professor of Midwifery, and of the Diseases of Women and Children.

WILLIAM W. GERHARD, M. D., lectures, in connexion with the University, upon clinical medicine in the Philadelphia Hospital.

WILLIAM E. HORNER, M. D., is the Dean of the Faculty.

Courses of Lectures are delivered by each of the Professors upon the branches of Medicine respectively attached to their chairs. Previously to the year 1837, these courses occupied only four months; but in consequence of the number of lectures which the shortness of the session rendered it necessary to crowd into each day, the student was subjected to more fatigue than was compatible either with his comfort or the most profitable exercise of his faculties. By the addition of two weeks or more to the session, the Faculty have endeavoured in some measure to obviate this disadvantage; and have at the same time gained an opportunity to give some expansion to those courses which were most restricted.

It may be proper to inform the medical community, that the aim of the Faculty is to render their courses as demonstrative as possible, so as to bring the senses of the pupil to the aid of his memory and intelligence. For this purpose, ample means of illustration are at the command of the Professors.

The ANATOMICAL MUSEUM, to which allusion has been already made, occupies an apartment in the Medical Hall fifty feet square, with a gallery on three sides which increases its capacity. It is well lighted, and is open to the medical class two mornings in the week. It is abundantly furnished with preparations of every kind calculated to give the fullest illustration of a course of Anatomical lectures. Its leading classes of objects are *dried arterial and venous injections, magnified drawings and models, the best Anatomical plates*, a great variety of *wet preparations*, exhibiting organs in their healthy and diseased states, and an ample series of *minute injections* for the purpose of illustrating ultimate structure. Interesting points of minute anatomy are exhibited, during the course of lectures, with the aid of the most improved microscopes.

The SURGICAL CABINET is also richly supplied with the means of illustration. The present professor has been diligently employed, for thirty years, in collecting *wet and dried specimens of morbid and surgical anatomy; highly finished oil pictures upon a magnified scale*, representing almost every variety of surgical disease; *accurate coloured models and casts in wax of natural and morbid anatomy; machinery and various forms of apparatus* for fractures, dislocations, spinal diseases, &c.; and *instruments* of the best description, ancient and modern; all of which are made subservient to the illustration of his lectures, which are throughout demonstrative and practical. The greater portion of the morbid collection has been derived from the extensive opportunities afforded the professor by his long connexion with hospitals, and other public institutions, in this city and elsewhere.

The CHEMICAL APPARATUS is, by the admission of all who have inspected it, unequalled in extent, variety, and splendour. Individuals who have visited the schools of Germany, France, and Great Britain, agree in the statement, that they have nowhere met with a laboratory so amply furnished with all that is calculated to illustrate the science of chemistry as that of Dr. Hare.

The course of Institutes is rendered as demonstrative as the subject will admit. The important facts connected with the

elementary structure, and the development of the tissues and organs, exhibiting the movements of life and the laws of vital activity, are illustrated by numerous drawings. These embrace all the most recent discoveries of the German, French, and English physiologists, in microscopic, comparative, and human anatomy. The principal pathological alterations, are also exhibited, in contrast with the natural state of the tissues, by the same graphic demonstration.

The Professor of Midwifery is also in possession of an ample cabinet. He has procured numerous paintings in oil, exhibiting, on a large scale, the structure and processes connected with his branch; and spares no pains or expense in illustrating the principles and practice of Midwifery, and the nature of the diseases of women and children, by actual demonstration, whenever possible, and by means of diagrams, models, machines, wax preparations, and instruments.

The illustrations of *Materia Medica* consist of painted figures of all the medicinal plants, dried and living specimens of such as are indigenous or naturalized in this country, or could be obtained from abroad, and specimens, upon a large scale, of all the medicines treated of in the lectures, not only in the ordinary forms in which they are employed, but also in their crude condition, their commercial varieties, and their different states of preparation. Occasion is taken, throughout the course, to exhibit, as far as possible, every fact of the science to the eye, and to render *Materia Medica*, what it was not formerly considered, a demonstrative subject.

The MEDICAL HALL is admirably adapted for the purposes of the school. Its central situation in the city gives to the pupil an opportunity of selecting his place of residence wherever circumstances may render it desirable, without being at too great a distance from the place of instruction. The ample space around it allows of that free circulation of air which is especially necessary, in an establishment of this kind, to comfort and the preservation of health. Its dimensions and external architectural character, are such as not to appear incongruous with the extent of the school, and the high objects for which it was established. Its internal arrangements are all that could be desired.

Besides distinct apartments for the various cabinets, and ample space for the prosecution of practical anatomy, there are three lecture rooms, each calculated for the comfortable accommodation of six hundred pupils. One of these rooms is devoted exclusively to chemistry, and in its extent and arrangements as a laboratory is nowhere surpassed. A second is appropriated to the other demonstrative branches, and was built under the immediate superintendence of the Professor of Anatomy, whose subject most requires all the extraneous aid which can be afforded by light and the proximity of the pupil. It is sixty feet square, with the seats circularly arranged about a central area, in which the demonstrations are made, and which is lighted from the roof immediately above it. The seats rise by a paraboloid ascent, so graduated as to allow the students in each row to see over the heads of those in the row beneath. The third room is appropriated to those departments of our science which do not require the aid of demonstration. The lectures of the different professors are so arranged in regard to time, that the student never remains in the same room two hours successively, but after every lecture passes into another apartment. He is thus enabled to escape the irksomeness of remaining very long in the same position, and gains the advantage of some exercise in the intervals between the lectures.

Nor is the plan of instruction confined exclusively within the Medical Hall. Clinical instruction in the different hospitals has always formed a part of medical education in this school; but it is only within a few years that the present system has been adopted, by which large classes can be instructed at the bedside. Formerly, the pupil walked through the different wards of the hospitals with the physician, and listened to his desultory observations as the patients came successively under his notice. This plan answers well enough where the number of pupils is small, not exceeding from ten to twenty; but is obviously altogether unsuited to large classes consisting of some hundreds. Sensible of its utter futility as regards the instruction of the pupil, and of its injury as regards the patient, the professors of the Practice, Surgery, and the Institutes, in this school, introduced some years since into the Alms House Hos-

pital the plan of having the patient brought on his bed into the centre of a lecture room fitted up for the purpose, and there making their clinical remarks within the view and hearing of the whole class. In surgical cases the opportunity is thus also afforded of performing whatever operations may be necessary in the presence of the class, who were formerly only called together into the operating room to witness operations deemed peculiarly interesting. Since the erection of the new Alms House, the medical department of which is now called the Philadelphia Hospital—the largest and most magnificent establishment of this kind upon the continent of America, and probably unsurpassed if equalled elsewhere—the system has been improved and extended, and clinical lectures are regularly delivered during the winter by the Professors of Surgery and of Anatomy, and by Dr. Gerhard on behalf of the Faculty. The same system has been carried into operation, in the Pennsylvania Hospital, by gentlemen every way competent to the undertaking; and thus the pupil has the benefit of a choice between two institutions, each having its peculiar advantages. It would not be proper to pass over unnoticed another improvement in clinical instruction as conducted in the Philadelphia Hospital. Allusion is had to the demonstrations of pathological anatomy, which are abundantly made by the physicians of the house in their clinical lectures, and which are of great importance to the student desirous of obtaining a thorough insight into the seat and nature of disease.

The general advantages of Philadelphia as a place of medical instruction are so well known as scarcely to require comment. Besides the public schools and great Hospitals, there are numerous and skilful private teachers whose aid may be advantageously sought by the student, and Dispensaries which afford the most valuable opportunities for obtaining practical familiarity with the phenomena and treatment of disease. A peculiar feature, indeed, of medical tuition in this city is the great extent and variety of private instruction, ramifying with the science in all its subdivisions, and serving as a highly useful auxiliary to the schools. This is an advantage possessed only by places which have been long the crowded resort of students, and in

which time and inducement have thus been afforded for the acquisition of that minute knowledge and skill in teaching which can spring from practice alone. Connected with some of our public institutions are also extensive medical libraries, accessible to the student, and affording him opportunity for research scarcely to be found elsewhere upon this continent. With these facilities for the attainment of medical knowledge are combined the recommendations of an agreeable and healthful residence, remarkable for the copious supply and excellent quality of all the necessaries and comforts of life, and unsurpassed in cheapness of living by any large city of the Union.

REGULATIONS OF THE MEDICAL DEPARTMENT OF THE
UNIVERSITY.

The Medical Department is under the immediate government of the Medical Professors, who constitute the Faculty of Medicine, subject to the rules and statutes of the Board of Trustees. It includes

- A Professorship of ANATOMY,
- A Professorship of the PRACTICE OF PHYSIC, and CLINICAL MEDICINE,
- A Professorship of MATERIA MEDICA and PHARMACY,
- A Professorship of CHEMISTRY,
- A Professorship of SURGERY,
- A Professorship of OBSTETRICS, and the DISEASES OF WOMEN AND CHILDREN,
- A Professorship of the INSTITUTES OF MEDICINE.

The Medical Faculty hold meetings for the purpose of arranging and conducting the business of their department, and establishing proper rules and regulations for the preservation of order and decorum among the medical students.

They appoint one of their own members to act as Dean, whose duty it is to keep the Minutes of the Faculty, to arrange the business of examining the candidates for medical degrees, to conduct the business of the Faculty at their meetings, and to attend to correspondence.

The Session for the Medical Lectures begins annually on the first Monday of November, and ends about the middle of March.

The Commencement for conferring Medical Degrees is held by a special mandamus of the Board of Trustees, early in April, and within as short a time as possible after the examinations of candidates are over.

The following are the regulations at present in force in relation to the degree of Doctor of Medicine.

1. Every candidate for this degree must have attained the

age of twenty-one years, have applied himself to the study of Medicine for three years, and have been, during that time, the private pupil, for two years at least, of a respectable practitioner of Medicine.

2. The candidate must have attended two complete courses of the following lectures in this Institution:

Anatomy,

Practice of Physic,

Materia Medica and Pharmacy,

Chemistry,

Surgery,

Obstetrics and the Diseases of Women and Children,

Institutes of Medicine.

3. He must also have attended one course of Clinical Instruction in the Philadelphia Hospital, (*Blockley*,) or the Pennsylvania Hospital, or some other Institution approved of by the Faculty of Medicine.

4. Medical students who have attended one complete course in a respectable Medical School, where the attendance on two complete courses is necessary to a degree, where the same branches are taught as in this, and which is placed upon the *ad Eundem* of this school, are permitted to become candidates by attendance here for one full course.

5. When candidates for a Medical Degree apply to the Dean for admission, they must exhibit their tickets to prove that the regulations have been complied with.

6. Each candidate, at the time of his application, which should be on or before the first day of February, must deliver to the Dean of the Medical Faculty a Thesis, composed by himself, on some medical subject. This Thesis is referred to one of the Professors, who shall examine the candidate upon it, and make his report to the Medical Faculty before a vote is taken.

7. When a candidate is rejected, his essay will be retained by the Medical Faculty.

8. When candidates withdraw their essays, they will, upon re-application, be placed at the foot of the list.

9. The essay must be in the candidate's own hand-writing,

and must be written uniformly on paper of the same size, the alternate pages being left blank.*

10. General bad spelling in a Thesis, or general inattention to the rules of grammar, will preclude a candidate from examination for a degree.

11. A Thesis may be published by the candidate if he desire it, the permission of the Professor by whom he was examined thereon being first obtained; but no alteration shall be made in the thesis without the consent of the Professor.

12. The voting on the case of each candidate is by private ballot, and three negative votes reject him.

13. Each candidate shall pay the fees of graduation, at the time of his examination, or before receiving notice of his success; and before his name can be entered on the Register of passed candidates, for the purpose of being reported to the Board of Trustees and included in the mandamus for a degree.

14. Candidates who have passed their examination, and in other respects complied with the regulations, are to be reported by the Dean to the Provost, who will communicate such report to the Board of Trustees, in order that, if approved of by them, their mandamus be issued for conferring the degree.

15. The degree will not be conferred upon a candidate who absents himself from the public commencement, except by special permission of the Medical Faculty.

16. Graduates of Medical Schools, on the ad Eundem list, by attending one complete course in this Institution, are put upon the same footing with students who have attended two complete courses here.

Rules of Examination for the Degree of Doctor of Medicine.

The names and essays of the candidates are to be presented to the Dean on or before the first day of February in each year. The candidates are then to be divided, either by their own

* The Essays must be written on Thesis paper, which can be procured at the Medical book-stores; this is for the purpose of convenient binding together into volumes.

arrangement or by that of the Dean, into classes of eight persons each.

These classes will be designated numerically by lot, and then formed into groups of seven each.

The examinations will begin on the last Monday in February or the first Monday in March, and be so conducted that the Commencement may take place early in April.

No person's name will be received on a class unless his essay is in possession of the Dean; nor is his name to be attached to a class by any other than the Dean, unless he shall have signified his desire to that effect.

The classes are to call at the houses of the several Professors, or at some other place designated by the latter; and when in attendance, each of the individuals composing a class is to be examined separately, and in the order of his name on the list of his class.

Each Professor is to keep a list of those examined by him, and opposite to the name of each individual examined is to note the result, so as, on consulting his paper, to be able to vote in the affirmative or negative as to his qualifications for the degree.

As the examinations of each group of classes shall be completed, the Faculty is to meet; the names of the candidates examined are to be read by the Dean; and as each name is called, the Professors are to consult their memoranda, and if no remarks be made, are to proceed to vote by ballot. If there should not be three negative votes, the candidate is to be considered as having passed, and is to be entitled to his degree. Should three black balls be cast against any individual, he is not to be considered as absolutely rejected, but is to have the privilege of another examination before the whole Faculty in joint session.

If, upon the name of a candidate being called out, one or more of the Faculty have any remarks to make in relation to his qualifications, they are to be heard before the vote is taken.

At the close of each meeting, the Dean is to make known the result of the ballot, by note, to each of the successful candidates, who is to pay his graduation fees before the note referred to will be delivered by the Janitor.

The candidates in classes being thus disposed of, the Faculty is then to proceed with those who may prefer a solitary examination, and afterwards with those who, having received three negative votes, may still choose to avail themselves of the opportunity of a final examination offered by the Faculty.

If any candidate who may not have succeeded in the first ballot, shall decline an examination before the Faculty in general session, he is to have the privilege of withdrawing his Thesis, without being considered as rejected.

If a Thesis be found remarkable for any good quality, the fact is to be reported by the Professor having charge of the thesis to the Faculty at their meeting, who may take upon it such action as they may deem advisable.

yllmōt eft. lo borogaih strit grisezzeade ni aetibibno en' T
 esimare yctiles o teletq yem oifw easil. ikiw bosom of met. si
 eomt beforoq mialad. oifw esoft ilia abswieia. bas. 'tolden
 -topp' eft lo aetfamed. lieva of oecoto lida yem. aetor evitagon
 -tum. ylloq' eft yd borogaih mialad. leu. o lo yam
 -tum. aetfent beforona evit. ion year oifw eftibitro yna. 't
 -lom. ni qleam' en' eftibitro mialad. ni onleeb. lida. 'tolden
 -oif' eft grisezzeade. lo eftiving eft evit. oif' eft. aetfent. lida
 -borogaih ea borogaih grisezzeade. ni
 eft. qleam' boog yna. yd eftibitro mialad. aetf' eft. l
 eft lo eftibitro grisezzeade. eft yd borogaih eft. oif' eft
 -tum. oif' eft. yem. oif' eft. grisezzeade. tacylloq' eft. etaholt
 -elsaribh monb. yna. yd. oif' eft. etaholt



